

**BY-LAWS
OF
ILLINOIS TOOL WORKS INC.
(amended and restated as of August 8, 2014)**

**ARTICLE I
Offices**

SECTION 1. Registered Office. The registered office shall be in the City of Wilmington, County of New Castle, State of Delaware.

SECTION 2. Other Offices. The corporation may also have offices in Glenview, Illinois, and offices at such other places as the board of directors or officers may from time to time determine.

**ARTICLE II
Stockholders**

SECTION 1. Annual Meeting. The annual meeting of the stockholders shall be in the month of April or May of each year. The place, date and time of the meeting shall be fixed by the board of directors and stated in the notice of the meeting.

SECTION 2. Special Meetings. Special meetings of the stockholders may be called by the chairman, the chief executive officer, the president or by a majority of the board of directors.

SECTION 3. Place of Meeting. The board of directors may designate any place, either within or outside of Delaware, as the place of meeting for any meeting of the stockholders (annual or special) or may provide for a meeting by means of remote communication. In the absence of any such designation, the place of meeting shall be the principal place of business of the corporation.

SECTION 4. Notice of Meetings. Written or printed notice stating the place, if any, or the means of remote communication, if any, day and hour of the meeting shall be delivered either personally or by mail, or, with the consent of the stockholder, by electronic transmission, by or at the direction of the chairman or persons calling the meeting to each stockholder of record entitled to vote at such meeting. If mailed, such notice shall be deemed to be delivered when deposited in the United States mails in a sealed envelope addressed to the stockholder at his address as it appears on the records of the corporation, with postage thereon prepaid. If given by electronic transmission, such notice shall be deemed to be delivered on the day such notice is transmitted.

SECTION 5. Voting of Shares by Certain Holders. Shares of stock standing in the name of another corporation, domestic or foreign, may be voted by such officer, agent or proxy as the by-laws of such corporation may prescribe, or, in the absence of such provision, as the board of directors of such corporation may determine.

Shares of stock standing in the name of a deceased person may be voted by his administrator or executor, either in person or by proxy. Persons holding stock in a fiduciary capacity shall be

entitled to vote the shares so held. Persons whose stock is pledged shall be entitled to vote, unless in the transfer by the pledgor on the books of the corporation he has expressly empowered the pledgee to vote thereon, in which case only the pledgee, or his proxy, may represent such stock and vote thereon.

Shares of stock standing in the name of a receiver may be voted by such receiver, and shares of stock held by or under the control of a receiver may be voted by such receiver without the transfer thereof into his name if authority so to do be contained in an appropriate order of the court by which such receiver was appointed.

SECTION 6. Fixing of Record Date. Unless any statute requires otherwise, for the purpose of determining (a) stockholders entitled to notice of or to vote at any meeting of stockholders, or (b) stockholders entitled to receive payment of any dividend, or (c) stockholders, with respect to any lawful action, the board of directors may fix in advance a date as the record date for any such determination of stockholders, such date in any case to be not more than sixty days and, in case of a meeting of stockholders, not less than ten days and, in the case of a merger, consolidation, sale, lease or exchange of assets, not less than twenty days. If no record date is fixed: (1) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; (2) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.

SECTION 7. Quorum. The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute, by the Certificate of Incorporation or by these by-laws. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote, present in person or represented by proxy, shall have power to adjourn the meeting from time to time until a quorum shall be present or represented. No notice other than an announcement at the meeting need be given unless the adjournment is for more than thirty days or a new record date is to be fixed for the adjourned meeting. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally notified.

When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the Certificate of Incorporation or of these by-laws, a different vote is required in which case such express provision shall govern and control the decision of such question.

SECTION 8. Proxies. At all meetings of stockholders, a stockholder may vote by proxy executed in writing or via electronic transmission by the stockholder or by his duly authorized

attorney-in-fact. Such proxy shall be filed with the secretary of the corporation before or at the time of the meeting. Proxies shall be valid only with respect to the meeting or meetings and any adjournment thereof, for which they are given.

SECTION 9. Voting. Each stockholder shall have one vote in person or by proxy for each share of stock having voting power registered in his name on the books of the corporation at the record date.

SECTION 10. Notice of Stockholder Business and Nominations for Directors.

(a) **Annual Meetings of Stockholders.**

(1) Nominations of persons for election to the board of directors of the corporation and the proposal of business to be considered by the stockholders at an annual meeting of stockholders may be made (i) pursuant to the corporation's notice of meeting, (ii) by or at the direction of the board of directors, or (iii) by any stockholder of the corporation who (x) is a stockholder of record at the time of giving notice provided for in this section 10 and at the time of the annual meeting of stockholders, (y) is entitled to vote at the meeting, and (z) complies with the notice procedures as to such business or nomination set forth in this section 10. Clause (iii) of this paragraph shall be the exclusive means for a stockholder to make nominations or submit other business (other than matters properly brought under Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and included in the corporation's notice of meeting) before an annual meeting of stockholders.

(2) For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of paragraph (a)(1) of this section 10, such other business must be a proper subject for stockholder action under Delaware corporation law, and the stockholder must have given timely notice of such nomination or other business in writing to the secretary of the corporation. To be timely, a stockholder's notice shall be delivered to the secretary at the principal executive offices of the corporation not earlier than the one hundred twentieth (120th) day and not later than the ninetieth (90th) day prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is more than thirty (30) days before or more than sixty (60) days after such anniversary date, notice by the stockholder to be timely must be so delivered not earlier than the one hundred twentieth (120th) day prior to such annual meeting and not later than the later of the ninetieth (90th) day prior to such annual meeting and the tenth (10th) day following the date on which public announcement of the date of such meeting is first made by the corporation. In no event shall the public announcement of an adjournment of an annual meeting commence a new time period for the giving of a stockholder's notice as described above.

To be in proper form, a stockholder's notice to the secretary must set forth:

(i) the following as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or business proposal is made:

(a) the name and address of such stockholder, as it appears on the corporation's books, and of the beneficial owner, if any;

(b) the class and number of shares of capital stock of the corporation that are owned beneficially and of record by such stockholder and beneficial owner, if any, as of the date of such notice (which information shall be supplemented by such stockholder and beneficial owner, if any, not later than ten (10) days after the record date for the meeting to disclose such ownership as of the record date);

(c) a description of any agreement, arrangement or understanding (including any derivative or short positions, profit interests, options, hedging transactions, and borrowed or loaned shares) that has been entered into as of the date of such notice by, or on behalf of, the stockholder or beneficial owner, if any, or any of their affiliates or associates, the effect or intent of which is to mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of the stockholder or beneficial owner, if any, or any of their affiliates or associates with respect to shares of stock of the corporation, and a representation that the stockholder or beneficial owner, if any, will notify the corporation in writing of any such agreement, arrangement or understanding in effect as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first publicly disclosed; and

(d) any other information relating to such stockholder and beneficial owner, if any, that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election of directors in a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder;

(ii) the following if the notice relates to any business other than the nomination of a director that the stockholder proposes to bring before the meeting:

(a) a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, and any material interest of such stockholder or beneficial owner, if any, in such business; and

(b) a description of all agreements, arrangements and understandings between such stockholder and beneficial owner, if any, and any other person or persons (including their names) in connection with the proposal of such business by such stockholder; and

(iii) the following as to each person whom the stockholder and beneficial owner, if any, proposes to nominate for election or re-election as a director:

(a) the name, age, and business and residential addresses of such person;

- (b) the principal occupation or employment of such person;
- (c) the number of shares of capital stock of the corporation beneficially owned by such person;
- (d) a statement that such person is willing to be named in the proxy statement as a nominee and to serve as a director if elected;
- (e) a statement as to whether such person, if elected, intends to comply with the procedures established by the Corporate Governance and Nominating Committee regarding the tender of resignations to the board of directors to address majority voting;
- (f) such other information regarding such person that would be required to be included under the proxy solicitation rules of the U.S. Securities and Exchange Commission had the board of directors nominated such nominee; and
- (g) an undertaking to provide such other information as the corporation may reasonably require to determine the eligibility of such person to serve as an independent director of the corporation or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such person.

(b) **Special Meetings of Stockholders.** Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting of stockholders pursuant to the corporation's notice of meeting. Nominations of persons for election to the board of directors may be made at a special meeting of stockholders only if directors are to be elected at such meeting pursuant to the corporation's notice of meeting. To be properly brought before a special meeting, nominations of persons for election to the board of directors must be (a) made by or at the direction of the board of directors or (b) provided that the board of directors has determined that directors shall be elected at such meeting, made by any stockholder of the corporation who (x) is a stockholder of record at the time of giving of notice provided for in this section 10 and at the time of the special meeting, (y) is entitled to vote at the meeting, and (z) complies with the notice procedures set forth in this section 10. Clause (b) of this paragraph shall be the exclusive means for a stockholder to make nominations for director before a special meeting of stockholders.

For nominations to be properly brought before a special meeting by a stockholder pursuant to clause (b) of the preceding paragraph, the stockholder must have given timely notice of the nomination to the secretary of the corporation in the form required by paragraph (a)(2) of this section 10. To be timely, a stockholder's notice shall be delivered to the secretary at the principal executive offices of the corporation not earlier than the one hundred twentieth (120th) day prior to such special meeting and not later than the later of the ninetieth (90th) day prior to such special meeting and the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the board of directors to be elected at such meeting. In no event shall the public announcement of an adjournment of a special meeting commence a new time period for the giving of a stockholder's notice as described above.

(c) **General.**

(1) Only such persons who are nominated in accordance with the procedures set forth in this section 10 shall be eligible to be elected as directors at a meeting of stockholders, and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this section 10. Except as otherwise provided by law, the Certificate of Incorporation or these by-laws, the chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made or proposed, as the case may be, in accordance with the procedures set forth in this section 10 and, if any proposed nomination or business is not in compliance with this section 10, to declare that such proposal shall be disregarded. Nothing in this section 10 shall preclude the board of directors or the Corporate Governance and Nominating Committee either from making nominations for the election of directors or from excluding the person nominated by a stockholder from the slate of directors presented to the meeting.

(2) For purposes of this section 10, "public announcement" shall mean disclosure in a press release reported by the PR Newswire or comparable national news service or in a document publicly filed by the corporation with the U.S. Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act and the rules and regulations promulgated thereunder.

(3) Nothing in this section 10 shall be deemed to affect any rights of (i) stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or (ii) the holders of any series of preferred stock if and to the extent provided for under law, the Certificate of Incorporation or these by-laws.

SECTION 11. Election of Directors. Except as provided in article III, section 8 of these by-laws, each director shall be elected by the vote of the majority of the votes cast with respect to the director at any meeting for the election of directors at which a quorum is present; provided, however, that directors shall be elected by a plurality of the votes cast at any meeting of stockholders for which (i) the secretary of the corporation receives a notice that a stockholder has nominated a person for election to the board of directors in compliance with the advance notice requirements for stockholder nominees for director set forth in article II, section 10 of these by-laws and (ii) such nomination has not been withdrawn by such stockholder as of a date that is ten days in advance of the date the corporation files its definitive proxy statement with the U.S. Securities and Exchange Commission (regardless of whether or not thereafter revised or supplemented). For purposes of this section, a majority of the votes cast means that the number of shares voted "for" a director must exceed the number of shares voted "against" that director. The Corporate Governance and Nominating Committee has established procedures regarding the tender of resignations to the board of directors to address majority voting.

ARTICLE III
Directors

SECTION 1. General Powers. The business and affairs of the corporation shall be managed by or under the direction of its board of directors.

SECTION 2. Number, Tenure and Qualifications. The number of directors of the corporation shall be not less than three nor more than twenty. The exact number of directors within such range may be set from time to time by resolution of the board of directors acting by the vote of not less than a majority of the directors then in office. No reduction in the number of directors shall have the effect of removing any director prior to the expiration of his term. Each director shall hold office for the term for which such director is elected or until a successor shall have been chosen and shall have qualified or until such director's earlier death, resignation, retirement, disqualification or removal.

SECTION 3. Regular Meeting. A regular meeting of the board of directors shall be held without other notice than this by-law, on the date of, and at the same place as, the annual meeting of stockholders. The board of directors may provide, by resolution, the time and place, either within or outside of Delaware, for the holding of additional regular meetings without other notice than such resolution.

SECTION 4. Special Meetings. Special meetings of the board of directors may be called by or at the request of the chairman, chief executive officer, or any two directors. The person or persons authorized to call special meetings of the board of directors may fix any place, either within or outside of Delaware, as the place for holding any special meeting of the board of directors called by them.

SECTION 5. Notice. Notice of any special meeting shall be given at least two days prior thereto by notice delivered personally, by mail, e-mail, facsimile or other electronic communication to each director at his business address or at such other address as he shall have previously requested in writing. If mailed, such notice shall be deemed to be delivered when deposited in the United States mails in a sealed envelope so addressed, with postage thereon prepaid. If notice is given by e-mail, facsimile or other electronic transmission, such notice shall be deemed to be delivered on the day such notice is transmitted. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the board of directors need be specified in the notice or waiver of notice of such meeting, unless otherwise required by law.

SECTION 6. Quorum. A majority of the board of directors shall constitute a quorum for the transaction of business at any meeting of the board of directors, provided that if less than a majority of the directors are present at said meeting, a majority of the directors present may adjourn the meeting from time to time without further notice. The act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors unless a greater number is required by the Certificate of Incorporation or these by-laws.

SECTION 7. Interested Directors. Except as may otherwise be provided in the Certificate of Incorporation, no contract or transaction between the corporation and one or more of its directors or officers, or between the corporation and any other corporation, partnership, association, or other organization in which one or more of its directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the board or committee thereof which authorizes the contract or transaction, or solely because his or their votes are counted for such purpose, if:

(a) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the board of directors or the committee, and the board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or

(b) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by the vote of the stockholders; or

(c) The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified, by the board of directors, a committee thereof, or the stockholders.

Common or interested directors may be counted in determining the presence of a quorum at a meeting of the board of directors or of a committee which authorizes the contract or transaction.

SECTION 8. Vacancies. If vacancies occur in the board of directors caused by death, resignation, retirement, disqualification or removal from office of any director or directors or otherwise, or if any new directorship is created by any increase in the authorized number of directors, a majority of the directors then in office, though less than a quorum, may choose a successor or successors, or fill the newly created directorship and the directors so chosen shall hold office until the next annual election of directors and until their successors shall be duly elected and qualified, unless sooner displaced.

SECTION 9. Committees. The board of directors may, by resolution passed by a majority of the whole board, designate one or more committees, each committee to consist of one or more of the directors of the corporation.

(a) The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member, at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors, shall have

and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to amending the Certificate of Incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation or a revocation of a dissolution, or amending the by-laws of the corporation; and, unless the resolution or the Certificate of Incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the board of directors. Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

(b) **Executive Committee.** The board of directors, by resolution adopted by a majority of the whole board, may designate two or more directors to constitute an Executive Committee and one or more directors as alternates thereof. Subject to the limitations provided in these by-laws and such further limitation as might be required by law or by the Certificate of Incorporation or by further resolution of the board of directors, the Executive Committee may, during intervals between meetings of the board of directors, exercise the powers of the board of directors in the management of the business and affairs of the corporation (including the corporation's dealings with its foreign subsidiaries, affiliates, and licensees) and may authorize the seal of the corporation to be affixed to all papers which may require it. The Executive Committee shall not be empowered to take action with respect to: issuing bonds, debentures; increasing or reducing the capital of the corporation; authorizing commitments and expenditures in excess of the total amount or amounts provided in the capital budgets approved or otherwise authorized by the board of directors; borrowing of monies, except within limits expressly approved by the board of directors; electing officers; fixing the compensation of officers; establishment of stock option plans, profit sharing or similar types of compensation plans, filling vacancies or newly created directorships on the board of directors; removing officers or directors of the corporation; dissolution, or any other action specifically reserved to the board of directors including all matters requiring the approval of stockholders. The Executive Committee may also from time to time formulate and recommend to the board for approval general policies regarding management of the business and affairs of the corporation. The designation of the Executive Committee and the delegation thereto of authority shall not operate to relieve the board of directors or any member thereof of any responsibility imposed upon it or him by operation of law. The secretary of the corporation (or in his absence a person designated by the Executive Committee) shall act as secretary at all meetings of the Executive Committee. A majority of the Executive Committee shall constitute a quorum for the transaction of business, and the act of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Executive Committee, provided that in the absence or disqualification of any member of the Executive Committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Regular meetings of the

Executive Committee may be held without notice at such times and at such places as shall be fixed by resolution adopted by a majority of the Executive Committee. Special meetings may be called by any member of the Executive Committee on twenty-four hours' prior written or electronic notice.

(c) **Compensation Committee.** The board of directors shall appoint a Compensation Committee. The composition and duties of such committee shall be as set forth in the Compensation Committee Charter.

(d) **Audit Committee.** The board of directors shall appoint an Audit Committee. The composition and duties of such committee shall be as set forth in the Audit Committee Charter.

(e) **Corporate Governance and Nominating Committee.** The board of directors shall appoint a Corporate Governance and Nominating Committee. The composition and duties of such committee shall be as set forth in the Corporate Governance and Nominating Committee Charter.

(f) **Finance Committee.** The board of directors, by resolution adopted by a majority of the whole board, may designate two or more directors to constitute a Finance Committee and one or more directors as alternate members thereof. The duties and responsibilities of the Finance Committee shall be to review, upon the request of the chairman, the chief executive officer or the president, management's proposals with respect to: the corporation's debt and equity financing; recommendations to the board with respect to dividend policy and payments; acquisitions and divestitures exceeding any standing authority management has by virtue of the resolution dated December 8, 2006, or its successors; recommendations to the board concerning the corporation's investment portfolio; the corporation's real estate investments; and other financing and investment matters. In addition, the Finance Committee shall oversee the investment of all funds identified with the U.S. pension and welfare benefit plans including "Rabbi trusts" associated with deferred compensation plans and monitor the governance and risks associated with non-U.S. employee benefit plans. In fulfilling its pension and benefits responsibilities, the Finance Committee may form and delegate authority or specific assignments to subcommittees, whose members may be Company employees or otherwise.

SECTION 10. Consent in Lieu of Meeting. Unless otherwise restricted by the Certificate of Incorporation or these by-laws, any action required or permitted to be taken at any meeting of the board of directors or any committee thereof may be taken without a meeting if all members of the board or committee thereof, as the case may be, consent thereto in writing or electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of the proceedings of the board or committee.

SECTION 11. Compensation. Directors who are also full-time employees of the corporation shall not receive any compensation for their services as directors but they may be reimbursed for reasonable expenses of attendance. By resolution of the board of directors, all other directors may receive compensation for their services together with reimbursement of expenses of

attendance, if any, at each regular or special meeting of the board of directors or any committee of the board of directors; provided, that nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity and receiving compensation therefor.

SECTION 12. Meeting by Conference Telephone. Unless otherwise restricted by the Certificate of Incorporation, members of the board of directors or any committee thereof may participate in a meeting of such board or committee by means of conference telephone or other communication equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant hereto shall constitute presence in person at such meeting. Unless otherwise required by law, no notice shall be required if a quorum of the board or any committee is participating.

SECTION 13. Emeritus Director. The board of directors may, from time to time, elect an emeritus director who shall serve at the pleasure of the board, subject to an annual review at the meeting of the board immediately preceding each annual meeting of stockholders, or until earlier resignation or removal by the board. An emeritus director shall serve as an advisor and consultant to the board of directors and may be appointed by the board to serve as advisor and consultant to committees of the board. An emeritus director may be invited to attend meetings of the board or any committee of the board for which he has been appointed to serve as advisor and consultant and, if present, may participate in the discussions occurring during such meetings. An emeritus director shall not be permitted to vote on matters brought before the board or any committee thereof and shall not be counted for the purpose of determining whether a quorum of the board or the committee is present. An emeritus director shall receive no fee for his services as an emeritus director. An emeritus director will be entitled to receive reimbursement for expenses of meeting attendance, as approved by the chairman of the board. An emeritus director may be removed at any time by the board of directors. References in these by-laws to “directors” or “board of directors” shall not mean or include an emeritus director.

ARTICLE IV Officers

SECTION 1. Elected Officers. The elected officers of the corporation may include a chairman, chief executive officer, president, one or more vice chairmen, one or more executive vice presidents, one or more senior vice presidents, chief financial officer and secretary. The elected officers may also include one or more vice presidents and such other officers as may be elected in accordance with the provisions of this article. Any two or more offices may be held by the same person.

SECTION 2. Appointed Officers. The appointed officers of the corporation may include one or more vice presidents, a treasurer, chief accounting officer, corporate controller, one or more assistant treasurers, one or more assistant secretaries, and such other officers as may be appointed in accordance with the provisions of this article. Any two or more offices may be held by the same person.

SECTION 3. Election and Term of Office. The elected officers of the corporation shall be elected annually by the board of directors at the meeting of the board of directors that is held on

the date of the annual meeting of stockholders. If the election of such officers shall not be held at such meeting, such election shall be held as soon thereafter as conveniently may be. Vacancies may be filled or new offices created and filled at any meeting of the board of directors. Each elected officer shall hold office until his successor shall have been duly elected and shall have qualified or until his death or until he shall resign or shall have been removed in the manner hereinafter provided. Appointed officers may be appointed from time to time by the chief executive officer or by any other elected officer authorized by the chief executive officer. Each appointed officer may hold office until his death or termination of employment or until he shall resign or shall have been removed in the manner hereinafter provided.

SECTION 4. Removal. Any officer or agent elected or appointed by the board of directors may be removed by the board of directors whenever in its judgment the best interests of the corporation would be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Appointed officers may be removed by the chief executive officer or other elected officer with the authority to appoint such appointed officer at any time, but such removal shall be without prejudice to the contract rights, if any, of the person so removed.

SECTION 5. Vacancies. A vacancy in any elected office because of death, resignation, removal, disqualification or otherwise, may be filled, and new offices may be created and filled, at any time by the board of directors.

SECTION 6. Chairman. The chairman shall: (i) provide leadership to the board of directors in reviewing and advising upon matters which exert major influence on the manner in which the corporation's business is conducted; (ii) preside at all meetings of the stockholders and of the board of directors; (iii) in the absence of the chairman of the Executive Committee, preside at all meetings of the Executive Committee; and (iv) perform such other duties as may be conferred by law or assigned by the board of directors. The chairman may sign, with the secretary or other proper officer of the corporation thereunto authorized by the board of directors, stock certificates of the corporation, any deeds, mortgages, bonds, contracts, or other instruments, except in cases where the signing or execution thereof shall be expressly delegated by the board of directors or by these by-laws to some other officer or agent of the corporation, or shall be required by law to be otherwise signed or executed. The chairman may also execute proxies on behalf of the corporation with respect to the voting of any shares of stock owned by the corporation; have the power to appoint agents or employees as in the chairman's judgment may be necessary or appropriate for the transaction of the business of the corporation; and in general shall perform all duties incident to the office of chairman.

SECTION 7. Chief Executive Officer. The chief executive officer shall in general manage, supervise and control all of the properties, business and affairs of the corporation and shall determine and administer the policies of the corporation as established by the board of directors or by the Executive Committee. In the absence of the chairman and a lead director, the chief executive officer shall preside at all meetings of the stockholders. In the absence of the chairman and a lead director, and if the chief executive officer is also a director, the chief executive officer shall preside at all meetings of the board and perform the duties and exercise the authority of the chairman. In the absence of the chairman of the Executive Committee and the chairman, and if the chief executive officer is also a director, the chief executive officer shall preside at all meetings of the Executive

Committee. The chief executive officer may sign, with the secretary or other proper officer of the corporation thereunto authorized by the board, any deeds, mortgages, bonds, contracts or other instruments except in cases where the signing or execution thereof shall be expressly delegated by the board or by these by-laws to some other officer or agent of the corporation, or shall be required by law to be otherwise signed or executed. The chief executive officer may also execute proxies on behalf of the corporation with respect to the voting of any shares of stock owned by the corporation. The chief executive officer shall have the power to appoint agents or employees as in his judgment may be necessary or appropriate for the transaction of the business of the corporation and in general shall perform all duties incident to the office of chief executive officer, and such other duties as may be prescribed by the board.

SECTION 8. President. The president (once elected by the board of directors) shall undertake and faithfully discharge such duties as assigned by the chief executive officer and shall administer the policies of the corporation as established by the board of directors or by the Executive Committee. In the absence of the chief executive officer, or in the event of his inability or refusal to act, the president shall perform the duties and exercise the powers of the chief executive officer. In the absence of the chairman, lead director and chief executive officer, the president shall preside at all meetings of the stockholders. The president may sign, with the secretary or other proper officer of the corporation thereunto authorized by the board, stock certificates of the corporation, any deeds, mortgages, bonds, contracts or other instruments except in cases where the signing or execution thereof shall be expressly delegated by the board or by these by-laws to some other officer or agent of the corporation, or shall be required by law to be otherwise signed or executed. The president may also execute proxies on behalf of the corporation with respect to the voting of any shares of stock owned by the corporation. The president shall have the power to appoint agents or employees as in his judgment may be necessary or appropriate for the transaction of the business of the corporation and in general shall perform all duties incident to the office of president, and such other duties as may be prescribed by the chief executive officer or the board.

SECTION 9. Vice Chairman. The vice chairman or vice chairmen shall assist the chief executive officer and the president in supervising the affairs of the corporation. In the event of the absence or disability of the president, the vice chairman shall assume all of the duties and responsibilities of president. In the event there is more than one vice chairman, then the first elected vice chairman shall assume all the duties and responsibilities of president. The vice chairman may sign, with the secretary or other proper officer of the corporation thereunto authorized by the board, any deeds, mortgages, bonds, contracts or other instruments, except in cases where the signing is required to be by some other officer or agent of the corporation. The vice chairman shall perform such other duties not inconsistent with these by-laws as may be designated by the chief executive officer, president or the board.

SECTION 10. Executive Vice President(s). The executive vice president or executive vice presidents shall perform such duties not inconsistent with these by-laws as may be assigned to him or them by the chief executive officer, the president, a vice chairman, or the board of directors. The executive vice president(s) may sign, with the secretary or other proper officer of the corporation thereunto authorized by the board, stock certificates of the corporation, any deeds, mortgages, bonds, contracts or other instruments, except in cases where the signing is required to be by some other officer or agent of the corporation. In the event of the absence or disability of the vice chairman

or vice chairmen, the executive vice president (or in the event there be more than one, the executive vice president determined in the order of election) shall assume all the duties and responsibilities of vice chairman.

SECTION 11. Senior Vice President(s). The senior vice president or senior vice presidents shall perform such duties not inconsistent with these by-laws as may be assigned to him or them by the chief executive officer, the president or the board of directors. Any senior vice president may sign, with the secretary or an assistant secretary, stock certificates of the corporation, and any deeds, mortgages, bonds, contracts or other instruments, except in cases where the signing is required to be by some other officer or agent of the corporation. In the event of the absence or disability of the chief executive officer, president, vice chairman or vice chairmen and the executive vice president or executive vice presidents, the senior vice president (or in the event there be more than one, the senior vice president determined in the order of election) shall assume all the duties and responsibilities of chief executive officer.

SECTION 12. Chief Financial Officer. The chief financial officer shall have general supervision over the financial affairs of the corporation. The chief financial officer shall also have such powers and perform such other duties not inconsistent with these by-laws as may be assigned to him by the chief executive officer, the president or the board of directors.

SECTION 13. Secretary. The secretary shall: (a) keep the minutes of the stockholders' and the board of directors' meetings in one or more books provided for that purpose; (b) see that all notices of the corporation are duly given in accordance with the provisions of these by-laws or as required by law; (c) be custodian of the corporate records and of the seal of the corporation and shall affix the same to such documents and other papers as the board of directors or the chief executive officer or president shall authorize and direct; (d) have charge of the stock certificate books, transfer books and stock ledgers and such other books and papers as the board of directors or the chief executive officer or president shall direct; (e) keep a register of the post office address of each stockholder which shall be furnished to the secretary by such stockholder; (f) sign with the president, a vice chairman, any executive vice president or any senior vice president, stock certificates of the corporation, the issue of which shall have been authorized by resolution of the board of directors; (g) have general charge of the stock transfer books of the corporation; (h) act as secretary at all meetings of the Executive Committee; and (i) in general perform all duties incident to the office of secretary. The secretary shall also have such other powers and shall perform such other duties not inconsistent with these by-laws as may from time to time be assigned by these by-laws or the chief executive officer, president or the board of directors.

SECTION 14. Vice President(s). In general, the vice president or vice presidents (if elected by the board of directors) shall perform such duties not inconsistent with these by-laws as may be assigned to him or them by the chief executive officer, president, a vice chairman, an executive vice president, a senior vice president, or the board of directors.

SECTION 15. Treasurer. If required by the board of directors, the treasurer shall give a bond for the faithful discharge of his duties in such sum and with such surety or sureties as the board of directors shall determine. He shall: (a) have charge and custody of and be responsible for all funds and securities of the corporation; receive and give receipts for monies due and payable to

the corporation from any source whatsoever, and deposit all such monies in the name of the corporation in such banks, trust companies or other depositories as shall be selected in accordance with the provisions of article VI of these by-laws; (b) in general perform all duties incident to the office of treasurer and such other duties not inconsistent with these by-laws as from time to time may be assigned to him by the chief executive officer, president, any vice chairman, any senior vice president, any vice president designated for such purpose or the board of directors.

SECTION 16. Chief Accounting Officer. The chief accounting officer shall oversee the accounting and financial reporting functions of the corporation. The chief accounting officer shall perform such other duties not inconsistent with these by-laws, incident to the office of chief accounting officer, as may be prescribed from time to time by the chief executive officer, president, chief financial officer, or the board of directors.

SECTION 17. Corporate Controller(s). The controller or controllers shall provide guidance and evaluation with respect to the corporation's accounting and related functions, control and procedures systems, budget programs, and coordinate same on a divisional and overall corporate level. The controller or controllers shall report to such officer or officers of the corporation and perform such other duties not inconsistent with these by-laws, incident to the office of controller, as may be prescribed from time to time by the chief executive officer, president, chief financial officer, or the board of directors.

SECTION 18. Assistant Treasurers and Assistant Secretaries. The assistant treasurers may be required to give bonds for the faithful discharge of their duties in such sums and with such sureties as the board of directors or chief executive officer or president shall determine. The assistant treasurers and assistant secretaries, in general, shall perform such duties not inconsistent with these by-laws as may be assigned to them by the treasurer or the secretary, respectively, or by the board of directors or the chief executive officer or president.

SECTION 19. Designated Presidents, Vice Presidents and Controllers. The chief executive officer may from time to time designate employees of the corporation who are managing one or several groups, divisions, or other operations of the corporation as "president", "vice president", "controller" or similar title, which employees shall not be considered to be officers of the corporation solely by reason of such appointments or titles.

SECTION 20. Salaries. The salaries of the elected officers shall be fixed from time to time by the board of directors on an annual basis and no elected officer shall be prevented from receiving such salary by reason of the fact that he is also a director of the corporation.

ARTICLE V

Indemnification of Officers, Directors and Employees

SECTION 1. Non-Derivative Actions and Criminal Prosecutions. To the fullest extent permitted by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the corporation to provide broader indemnification rights than said law

permitted the corporation to provide prior to such amendment), the corporation shall indemnify any director, officer or employee who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that he is or was a director, officer, employee, trustee, fiduciary or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, trustee, fiduciary or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, including service with respect to employee benefit plans maintained or sponsored by the corporation, against expenses (including attorneys' fees), judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

SECTION 2. Derivative Actions. To the fullest extent permitted by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the corporation to provide broader indemnification rights than said law permitted the corporation to provide prior to such amendment), the corporation shall indemnify any director, officer or employee who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee, trustee, fiduciary or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, trustee, fiduciary or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, including service with respect to employee benefit plans maintained or sponsored by the corporation, against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable for negligence or misconduct in the performance of his duty to the corporation unless and only to the extent that the court in which such action or suit was brought shall determine upon application that despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

SECTION 3. Right to Indemnification. To the extent that a director, officer or employee of the corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in sections 1 and 2 of this article, or in defense of any claim, issue or matter therein, he shall be indemnified by the corporation against expenses (including attorneys' fees) actually and reasonably incurred by him in connection therewith.

SECTION 4. Where No Adjudication. Any indemnification under sections 1 and 2 of this article (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director, officer or employee is proper in the circumstances because he has met the applicable standard of conduct set forth in said sections 1 and 2. Such determination shall be made (i) by the board of directors by a majority vote of a quorum consisting of directors who were not parties to such action, suit or proceeding, or (ii) if such a quorum is not obtainable, or, even if obtainable and a quorum of disinterested directors so directs, by independent legal counsel (compensated by the corporation) in a written opinion, or (iii) by the stockholders.

SECTION 5. Expenses. Expenses incurred in defending a civil or criminal action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding as authorized by the board of directors in the specific case upon receipt of an undertaking by or on behalf of the director, officer or employee to repay such amount unless it shall ultimately be determined that he is entitled to be indemnified by the corporation as authorized in this article.

SECTION 6. Non-exclusive. The indemnification and advancement of expenses provided by this article shall not be deemed exclusive of any other rights to which a director, officer or employee seeking indemnification or advancement of expenses may be entitled under any by-law, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office.

SECTION 7. Insurance. The corporation may purchase and maintain insurance on behalf of any director, officer or employee who is or was a director, officer, employee, trustee, fiduciary or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, trustee, fiduciary or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, including service with respect to employee benefit plans maintained or sponsored by the corporation, against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify him against such liability under the provisions of this article or applicable law.

SECTION 8. Contractual Nature. The duties of the corporation to indemnify and to advance expenses to a director, officer or employee shall be in the nature of a contract between the corporation and each such person, which contractual rights vest at the time of such person's service to or at the request of the corporation. Such indemnification and advancement rights cannot be terminated by the corporation, board of directors or the stockholders of the corporation with respect to a person's service prior to the date of such termination. The indemnification and advancement of expenses provided by this article shall continue as to a director, officer or employee who has ceased to be a director, officer, employee, trustee, fiduciary or agent and shall inure to the benefit of the heirs, executors and administrators of such person. No amendment or repeal of any provisions of this article shall alter, to the detriment of such person, the right of such person to the advancement of expenses or indemnification related to a claim, whether brought or threatened before or after such amendment or repeal, based on an act or failure to act that took place prior to such amendment or repeal. Each director, officer or employee who shall act as a director, officer, employee, trustee,

fiduciary or agent of the corporation shall be deemed to be doing so in reliance upon the rights provided by this article.

ARTICLE VI

Contracts, Loans, Checks and Deposits

SECTION 1. Contracts. The board of directors may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name of any on behalf of the corporation, and such authority may be general or confined to specific instances.

SECTION 2. Loans. No loans shall be contracted on behalf of the corporation and no evidence of indebtedness shall be issued in its name unless authorized by a resolution of the board of directors. Such authority may be general or confined to specific instances.

SECTION 3. Checks, Drafts, etc. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the corporation, shall be signed by such officer or officers, agent or agents of the corporation and in such manner as shall from time to time be determined by resolution of the board of directors.

SECTION 4. Deposits. All funds of the corporation not otherwise employed shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositories as the board of directors may select.

ARTICLE VII

Stock Certificates

SECTION 1. Stock Certificates. The shares of capital stock of the corporation may be certificated or uncertificated or a combination thereof. A resolution approved by a majority of the board of directors may provide that some or all of any or all classes or series of the capital stock of the corporation will be uncertificated shares. Any certificates representing shares of stock of the corporation shall be in such form as may be determined by the board of directors, shall be numbered and shall be entered in the books of the corporation as they are issued. They shall exhibit the holder's name and number of shares and shall be signed by the chairman, the president, any executive vice president, any senior vice president, or a vice president (if elected by the board of directors) and the treasurer or an assistant treasurer or the secretary or an assistant secretary, and shall be sealed with the seal of the corporation. If a stock certificate is countersigned (a) by a transfer agent other than the corporation or its employee, or (b) by a registrar other than the corporation or its employee, any other signature on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

SECTION 2. Lost Certificates. The board of directors may from time to time make such provision as it deems appropriate for the replacement of lost, stolen or destroyed stock certificates, including the requirement to furnish an affidavit and an indemnity.

SECTION 3. Transfers of Stock. Transfers of shares of capital stock of the corporation shall be made by the corporation or the transfer agent of the corporation after receipt of a request from the record holder of such capital stock, or from an attorney lawfully constituted in writing, with proper evidence of succession, assignment or authority to transfer and, in the case of stock represented by a certificate, upon surrender of the certificate duly endorsed or accompanied by proper evidence of succession, assignment of authority to transfer. The person in whose name shares of stock stand on the books of the corporation shall be deemed the owner thereof for all purposes as regards the corporation.

SECTION 4. Transfer Agents and Registrars. The board of directors may appoint one or more transfer agents and registrars and may thereafter require all stock certificates to bear the signature of a transfer agent and registrar.

SECTION 5. Rules of Transfer. The board of directors shall have the power and authority to make all such rules and regulations as they may deem expedient concerning the issue, transfer and registration of shares of stock of the corporation.

ARTICLE VIII Fiscal Year

The fiscal year of the corporation shall begin on the first day of January in each year and end on the thirty-first of December in each year.

ARTICLE IX Dividends

The board of directors may from time to time, declare, and the corporation may pay, dividends on its outstanding shares of stock in the manner and upon the terms and conditions provided by law and its Certificate of Incorporation.

ARTICLE X Seal

The board of directors shall provide a corporate seal which shall be in the form of a circle and shall have inscribed thereon the name of the corporation and the words "Corporate Seal, Delaware".

ARTICLE XI Waiver of Notice

Whenever any notice whatever is required to be given under the provisions of these by-laws or under the provisions of the Certificate of Incorporation or under the provisions of the General Corporation Law of Delaware, waiver thereof in writing or electronic transmission, signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice. Attendance of any person at a meeting for which

any notice whatever is required to be given under the provisions of these by-laws, the Certificate of Incorporation or the General Corporation Law of Delaware shall constitute a waiver of notice of such meeting, except when the person attends for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.